

**Compliance Questionnaire and**

**Reliability Standard Audit Worksheet**

**PRC-010-0 — Technical Assessment of the Design and Effectiveness of**

**Undervoltage Load Shedding Program**

**Registered Entity:**  *(Must be completed by the Compliance Enforcement Authority)*

**NCR Number:**  *(Must be completed by the Compliance Enforcement Authority)*

**Applicable Function(s): LSE, TO, TOP, DP**

**Auditors:**

**Disclaimer**

 NERC developed this Reliability Standard Audit Worksheet (RSAW) language in order to facilitate NERC’s and the Regional Entities’ assessment of a registered entity’s compliance with this Reliability Standard. The NERC RSAW language is written to specific versions of each NERC Reliability Standard. Entities using this RSAW should choose the version of the RSAW applicable to the Reliability Standard being assessed. While the information included in this RSAW provides some of the methodology that NERC has elected to use to assess compliance with the requirements of the Reliability Standard, this document should not be treated as a substitute for the Reliability Standard or viewed as additional Reliability Standard requirements. In all cases, the Regional Entity should rely on the language contained in the Reliability Standard itself, and not on the language contained in this RSAW, to determine compliance with the Reliability Standard. NERC’s Reliability Standards can be found on NERC’s website. Additionally, NERC Reliability Standards are updated frequently, and this RSAW may not necessarily be updated with the same frequency. Therefore, it is imperative that entities treat this RSAW as a reference document only, and not as a substitute or replacement for the Reliability Standard. It is the responsibility of the registered entity to verify its compliance with the latest approved version of the Reliability Standards, by the applicable governmental authority, relevant to its registration status.

The NERC RSAW language contained within this document provides a non‑exclusive list, for informational purposes only, of examples of the types of evidence a registered entity may produce or may be asked to produce to demonstrate compliance with the Reliability Standard. A registered entity’s adherence to the examples contained within this RSAW does not necessarily constitute compliance with the applicable Reliability Standard, and NERC and the Regional Entity using this RSAW reserves the right to request additional evidence from the registered entity that is not included in this RSAW. Additionally, this RSAW includes excerpts from FERC Orders and other regulatory references. The FERC Order cites are provided for ease of reference only, and this document does not necessarily include all applicable Order provisions. In the event of a discrepancy between FERC Orders, and the language included in this document, FERC Orders shall prevail.

Subject Matter Experts

Identify your company’s subject matter expert(s) responsible for this Reliability Standard. Include the person's title, organization and the requirement(s) for which they are responsible. Insert additional lines if necessary.

**Response: *(Registered Entity Response Required)***

|  |  |  |  |
| --- | --- | --- | --- |
| **SME Name** | **Title** | **Organization** | **Requirement** |
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# Reliability Standard Language

**PRC-010-0 — Technical Assessment of the Design and Effectiveness of Undervoltage Load Shedding Program**

**Purpose:**

Provide System preservation measures in an attempt to prevent system voltage collapse or voltage instability by implementing an Undervoltage Load Shedding (UVLS) program.

**Applicability:**

 Load-Serving Entity that operates a UVLS program

 Transmission Owner that owns a UVLS program

Transmission Operator that operates a UVLS program

 Distribution Provider that owns or operates a UVLS program

**NERC BOT Approval Date: 2/8/2005**

**FERC Approval Date: 3/16/2007**

**Reliability Standard Enforcement Date in the United States: 6/18/2007**

**Requirements:**

1. The Load-Serving Entity, Transmission Owner, Transmission Operator, and Distribution Provider that owns or operates a UVLS program shall periodically (at least every five years or as required by changes in system conditions) conduct and document an assessment of the effectiveness of the UVLS program. This assessment shall be conducted with the associated Transmission Planner(s) and Planning Authority(ies).

 **R1.1.** This assessment shall include, but is not limited to:

**R1.1.1.** Coordination of the UVLS programs with other protection and control systems in the Region and with other Regional Reliability Organizations, as appropriate.

**R1.1.2**. Simulations that demonstrate that the UVLS programs performance is consistentwith Reliability Standards TPL-001-0, TPL-002-0, TPL-003-0 and TPL-004-0.

**R1.1.3**. A review of the voltage set points and timing.

**Describe, in narrative form, how you meet compliance with this requirement: *(Registered Entity***

***Response Required)***

# R1 Supporting Evidence and Documentation

**Response: *(Registered Entity Response Required)***

|  |  |
| --- | --- |
|  |   **Provide the following:** **Document Title and/or File Name, Page & Section, Date & Version** |
| **Title** | **Date** | **Version** |
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| *Audit Team: Additional Evidence Reviewed:* |  |  |
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***This section must be completed by the Compliance Enforcement Authority***

**Compliance Assessment Approach Specific to PRC-010-0 R1.**

\_\_\_ Determine if the entity owns or operates a UVLS system. If yes:

 \_\_\_ Review the evidence provided by the entity to verify that the entity has conducted and

 documented an assessment within the past 5 years.

 \_\_\_ Review the evidence provided by the entity to determine if changes in system conditions

 required an assessment of the UVLS system recently (within the past 5 years).

\_\_\_ Review the evidence provided by the entity to verify the entity conducted and documented an assessment after the above system changes.

 \_\_\_ Review the evidence provided by the entity to verify the above assessment(s) included:

 \_\_\_ Coordination of UVLS program with other protection and control systems in the Region and other Regional Reliability Organizations/Regional Entities as appropriate.

 \_\_\_ Simulations that demonstrate the UVLS program performance is consistent with NERC Reliability Standards TPL-001-0, TPL-002-0, TPL-003-0, and TPL-004-0.

\_\_\_ A review of the voltage set points and timing.

**Auditors Detailed notes:**

1. The Load-Serving Entity, Transmission Owner, Transmission Operator, and Distribution Providerthat owns or operates a UVLS program shall provide documentation of its current UVLS program assessment to its Regional Reliability Organization and NERC on request (30 calendar days).

(Retirement approved by FERC effective January 21, 2014.)

# Supplemental Information

 **PRC-010-0 — Questions**

**Question:** Do you have or is your company required by the region to have a UVLS program?

  **Entity** **Response: *(Registered Entity Response Required)***

**Other ‑** The list of questions above is not all inclusive of evidence required to show compliance with the Reliability Standard. Provide additional information here**, as necessary that** demonstrates compliance with this Reliability Standard.

  **Entity** **Response: *(Registered Entity Response)***

# Compliance Findings Summary (to be filled out by auditor)

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| **Req.** | **C** | **PV** | **OEA** | **NA** | **Statement** |
| **1** |  |  |  |  |  |
| **2** | (Retirement approved by FERC effective January 21, 2014.) |

**Excerpts from FERC Orders -- For Reference Purposes Only**

**Updated Through March 31, 2009**

**PRC-010-0**

**Order 693**

P 1418. Protection and Control systems (PRC) on Bulk-Power System elements are an integral part of reliable grid operation. Protection systems are designed to detect and isolate faulty elements on a system, thereby limiting the severity and spread of system disturbances, and preventing possible damage to protected elements. The function, settings and limitations of a protection system are critical in establishing SOLs and IROLs. The PRC Reliability Standards apply to transmission operators, transmission owners, generator operators, generator owners, distribution providers and regional reliability organizations and cover a wide range of topics related to the protection and control of power systems.

P 1499. PRC-010-0 requires transmission owners, transmission operators, LSEs and distribution providers to periodically conduct and document an assessment of the effectiveness of their UVLS program at least every five years or as required by changes in system conditions. The assessment must be conducted with the associated transmission planner and planning authority.

P 1507. …We do not believe this Reliability Standard is aimed at universal coordination among UVLS programs that address local system problems.

P 1509. … For the reasons discussed in the NOPR,as well as our explanation above, the Commission approves Reliability Standard PRC-010-0 as mandatory and enforceable….

**Revision History**

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| --- | --- | --- | --- |
| **Version** | **Date** | **Reviewers** | **Revision Description** |
| 1 | October 2009 | RSAW Working Group | New Document. |
| 1 | December 2010 | QRSAW WG | Revised Findings Table, modified Supporting Evidence tables, and added Revision History. |
| 1 | January 2011 | Craig Struck | Reviewed for format consistency and content. |
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